

Turbidity	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Contamination
Turbidity (NTU) TT *representative samples of filtered water	No more than 1 NTU * Less than 0.3 NTU in 95% of monthly samples	0.33	99.9	NO	Soil Runoff

Regulated Contaminant Test Results							
Contaminant level (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination

Radioactive Contaminants							
Beta photon emitters (pCi/L)	50	0	5.1	N/A	5/20/2008	NO	May occur due to contamination from facilities using or producing radioactive materials
Alpha emitters (4000) (pCi/L)	15	0	1.7	N/A	5/20/2008	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	1.3	N/A	5/20/2008	NO	Erosion of natural deposits
Uranium (µg/L)	30	0	0.17	N/A	5/20/2008	NO	Erosion of natural deposits
Radionuclides are sampled on a 6 year cycle and will be tested for again in 2014.							

Inorganic Contaminants							
Barium (1010) (ppm)	2	2	0.019	0.019	2/21/2012	NO	Drilling wastes, metal refineries, erosion of natural deposits
Fluoride (1025) (ppm)	4	4	1.21	0.78 - 1.21	daily	NO	Water additive which promotes strong teeth
Nitrate (1040) (ppm)	10	10	0.43	0.43	2/21/2012	NO	Runoff from fertilizer use, leaching from septic tanks, sewerage, erosion of natural deposits
Copper (1022) (ppm) sites exceeding action level = 0	AL = 1.3	1.3	(90th percentile) = 0.059	0.0 - 0.106	8/24/2010	NO	Corrosion of household plumbing systems
Lead (1030) (ppb) sites exceeding action level = 0	AL = 15	0	(90th percentile) = 3	nd - 3	8/24/2010	NO	Corrosion of household plumbing systems
Lead and copper are sampled on a 3 year cycle and will be tested for again in 2013.							

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Wilmore Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm but reported as 2.48x10)	TT*	N/A	1.52	1.24 - 1.81	quarterly	NO	Naturally present in the environment
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance.							

Chlorine (ppm)	MIRD _L =4	MIRD _G =4	2.14	0.2 - 2.14	daily	NO	Water additive used to control microbes
HAA (all sites) haloacetic acids (ppb)	60	N/A	55	14 - 70	quarterly	NO	Byproduct of drinking water disinfection
THM (all sites) total trihalomethanes (ppb)	80	N/A	63	20 - 100	quarterly	NO	Byproduct of drinking water disinfection

Unregulated Contaminants						
Chloroform	129411	43	14 - 65	quarterly		
Bromochloromethane	129431	16	6 - 26	quarterly		
Dibromochloromethane (Chlorobromo)	129441	4	1 - 8	quarterly		

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2012 Annual Water Quality Report

it is a privilege for us to serve our friends and neighbors in Wilmore. We are proud of the water we produce here and had no water quality violations in 2012. We always strive for excellence in the quality of product we produce.

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs, and wells. The surface water source of our drinking water in Wilmore is the Kentucky River. When the river flows over the surface of the land or underground it can dissolve naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Some of these contaminants are:

Microbial, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least some amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA Safe Drinking Water Hotline at 1-800-426-4791**.

In order to ensure that tap water is safe to drink, the Environmental Protection Administration (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Protection of the quality of our source water is very important. A plan detailing potential pollution sources of our water supply has been prepared. It lists sources of potential contamination in Jessamine county as local highways and railroads (in the event of accidents and spills), agricultural activities (pesticides and fertilizer), and permitted activities (wastewater treatment plants, large capacity septic systems, underground storage tanks, and Tier II chemical users). This plan is available for inspection at Wilmore City Hall, 335 E. Main Street, Wilmore, KY.

The Wilmore City Council meets most Mondays and if you have questions about your community water system, you may ask them at these meetings. The Council meets at City Hall, 335 E. Main Street, Wilmore, KY. beginning at 6:00 p.m. Questions may also be addressed by calling Utilities/Public Works Director David Carlstedt at 859-858-4251 or Utilities Operations Manager Mike LaSage at 859-858-4711.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Between January 1st and December 31st, 2012 we conducted hundreds of tests on the water that we supplied to you. These tests were conducted on different schedules – some annually, some quarterly, some weekly, some daily, some hourly, and some continuously. The constituents we encountered in the water we produce are listed in the included tables. Only the constituents we found are listed. For a full list of tests we conducted, contact the water plant at 859-858-4711 or City Hall at 859-858-4411. For you to better understand the results of the tests we performed, you will need to understand some definitions in "water language":

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLs are set at very stringent levels. It is estimated that a person would have to drink 2 liters of water every day for a lifetime containing contaminants at the Maximum Contaminant Level (MCL) to have a one-in-a-million chance of experiencing the described health effect for that contaminant.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system shall follow.

Parts per million (ppm) or milligrams per liter (mg/L) may be compared to one minute in two years.

Parts per billion (ppb) or micrograms per liter (µg/L) may be compared to one minute in two thousand years.

Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) – measure of radiation absorbed by the body.

Nephelometric Turbidity Unit (NTU) is a measure of the clarity of water. Turbidity in excess of 5 NTUs is just noticeable without instruments to the average person.

Non-detect (ND) means that laboratory analysis indicates that a constituent is not present.